UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 May 2005</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-23 and 25-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-5, 7-23, 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-2, 4-5, 7-23 and 25-27 have been

considered but are moot in view of the new ground(s) of rejection.

1. The amendment contains an incorrect dependency – claims 4 and 5 depend

from cancelled claim 3. The examiner assumes these two claims depend from claim 1.

2. A new rejection is found below based on the amendment received.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-5, 7-23, 25-27 rejected under 35 U.S.C. 103(a) as being

unpatentable over Silver's Unified Network Presence Management White Paper and

further in view of Forssen et al. US 6,031,490 and Smyth et al. US 6,347,224.

As per **claim 1**, Silver teaches a method comprising:

Determining at least one presence rule, wherein the presence rule comprises a

condition and a state (page 2, 3rd paragraph teaches use of an agent that predicts best

method of contacting the user at a particular moment in time, at a given location, based

on the user's availability, device capability and personal preferences which reads on

condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3rd

paragraph);

and wherein the condition is based on a location of the mobile device (page 2, 3rd

paragraph teaches a "given location" which reads on the claim)

Determining whether the condition is met (page 4, 4th paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met); and

When the condition is met, updating presence information for a mobile device with the state (again, page 4, 4th paragraph teaches receiving notifications if/when presence data changes which reads on the condition being met and updating presence data). Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered"), **but is silent on** wherein the location is determined using a hotspot with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

Forssen teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while **Smyth** teaches that cellular networks provide macro and micro cells - the former provide country wide coverage but a low bandwidth, the latter service local `hotspots` with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

As per **claim 2**, Silver teaches claim 1 wherein the condition is based on time (page 2, 3rd paragraph teaches a "particular moment in time" which reads on the claim).

As per **claim 4**, Silver teaches claim 3 **but is silent on** wherein the location is determined using GPS.

The examiner notes that GPS location determination is well known in the art and can be used by a person in a handheld device, integrated into a cell phone, etc.. Hence one skilled would use GPS to determine a person's location.

Forssen teaches use of GPS to determine a person's location (title, figure 2 #120, figure 5 and C5, L64-67 and C13, L40-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using GPS, to provide an alternate means for determining the location of the mobile device.

As per **claim 5**, Silver teaches claim 3 wherein the location is determined using a cell-based radio network (page 2, 5th paragraph teaches "cellular location" which reads on using the cellular network to determine mobile's location as is well known in the art (see Forssen and Smyth, not cited).

As per **claim 7**, Silver teaches a server (page 4 shows architecture for Unified Network Presence Manager which the examiner interprets as being hosted on a computer/server and the PMD/PSM/UNMM defined on page 3 as running/hosted on said server) comprising:

Presence information (page 3, see PMD - discloses that the PMD represents a common repository in which subscriber presence data is deposited/retrieved), and

A controller to determine a presence rule for a mobile device (page 3, PSM defined as containing preference logic and rule-based processes which reads on a controller), wherein the presence rule comprises a condition and a corresponding state, the condition is based on a location of the mobile device (page 2, 3rd paragraph teaches a "given location" which reads on the claim) and to update the presence information with

the corresponding state when the condition is met (page 2, 3rd paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3rd paragraph. See page 4, 4th paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met. Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered") **but is silent on** wherein the location is determined using a hotspot with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

Forssen teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while **Smyth** teaches that cellular networks provide macro and micro cells - the former provide country wide coverage but a low bandwidth, the latter service local `hotspots` with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

As per **claim 8**, Silver teaches claim 7 wherein the condition is based on a calendar (page 2, 4th paragraph teaches use of PDA which can host a calendar and 5th paragraph specifically teaches a calendar).

As per **claim 9**, Silver teaches claim 7 wherein the controller is to determine the location of the mobile device (page 2, 3rd paragraph teaches "in a given location" which requires the system to locate the user).

As per **claim 10**, Silver teaches claim 9 wherein the condition is based on location (page 2, 3rd paragraph teaches a "given location" which reads on the claim since the system can determine a condition by locating the user, eg. user is/is not at a specific location).

As per **claim 11**, Silver teaches claim 7 wherein the server further uses the presence information in an instant messaging system (page 2, 1st paragraph teaches interfacing to and communicating with an instant messaging system).

As per **claim 12**, Silver teaches a mobile device (page 2, 1st paragraph teaches mobile devices) comprising:

A controller to determine a location of the mobile device (page 2, 3rd paragraph teaches "a given location" which requires determination of user's position, 5th paragraph teaches "cellular location"), to update presence information based on the location and to send the presence information to a server (page 5 last paragraph teaches determination of a "network presence" which combines with the "given location" to be interpreted as a location and drives updating of presence data at the UNMM server – see page 5, second to last paragraph which teaches an example of a person registering at a hotel which causes an indicator to be generated based on said registering and reads on updating the presence data. The PMD/PSM/UNMM described on page 3 would be updated as the user roams) **but is silent on** using a hotspot with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and are typically used for short-range high-bandwidth RF communications (as they roam into said hotspot's coverage area).

Forssen teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while **Smyth** teaches that cellular networks provide macro and micro cells - the former provide country wide coverage but a low bandwidth, the latter service local `hotspots` with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

As per **claim 13**, Silver teaches claim 12 wherein the controller further is to update the presence information based on a condition and a corresponding state, wherein the condition comprises the location (page 2, 3rd paragraph teaches "a given location" while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3rd paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from "logged off network" to "logged on to network").

As per **claim 14**, Silver teaches claim 13 wherein the controller is further to update the presence information with the corresponding state when the condition is met page 2, 3rd paragraph teaches "a given location" while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3rd paragraph which discloses the user registering whereby its location becomes known and the PSM

updates location/state because the condition has changed from "logged off network" to "logged on to network". This data will be sent to the PMD repository each time a user's state changes).

As per **claim 15**, Silver teaches claim 12 wherein the presence information comprises reachability information (page 2, 3rd paragraph teaches "a given location" while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3rd paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from "logged off network" to "logged on to network". Hence, turning one's phone on will register the user onto the network, change their presence information thus changing their reachability status).

As per **claim 16**, Silver teaches claim 15 wherein the reachability information comprises an identification of an instant messaging system to which the mobile device is connected (page 2, 1st paragraph teaches interfacing to and communicating with instant messaging systems which inherently requires identification of the system to which the mobile is connected. The examiner notes that most IM systems are Internet based which uses TCP/IP and requires IP Addressing to/from users/systems).

As per **claim 17**, Silver teaches claim 15 wherein the reachability information comprises identification of a cellular network to which the mobile device is connected (page 2, 1st paragraph teaches interfacing to and communicating with mobile telephony systems and requires the user to identify/authenticate to said mobile system. Page 5, 5th paragraph teaches GSM system registration).

As per **claim 18**, Silver teaches a signal-bearing medium comprising instructions (PMD/PSM/UNMM are hosted on a computer), wherein the instructions when read and executed by a processor (said computer executes instructions/software) comprise:

Determining a presence rule for a mobile device, wherein the presence rule comprises a condition and a corresponding state (page 2, 3rd paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3rd paragraph), and wherein the condition is based on a location of the mobile device (page 2, 3rd paragraph teaches a "given location" which reads on the claim),

Determining when the condition is met (page 4, 4th paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met), and

Sending the corresponding state to a presence server when the condition is met state (again, page 4, 4th paragraph teaches receiving notifications if/when presence data changes which reads on the condition being met and updating presence data). Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered"),

but is silent on wherein the location is determined using a hotspot with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

Forssen teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while Smyth teaches that cellular networks provide macro and micro cells - the former provide

country wide coverage but a low bandwidth, the latter service local `hotspots` with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

As per **claim 19**, Silver teaches claim 18 wherein determining the presence rule further comprises querying a user of the mobile phone for the presence rule (page 2, 5th paragraph teaches harvesting presence data from the user while page 3, PSM is the logic that will query the mobile user/device as their presence data/rule(s) changes).

As per **claim 20**, Silver teaches claim 18, wherein determining the presence rule further comprises loading the presence rule from a server (page 3, PMD/PSM/UNMM are hosted on a server and the PSM contains logic/rules processes to determine presence data and reads on the claim).

As per **claim 21**, Silver teaches claim 20 wherein the corresponding state is selected from a group consisting of available, not available, busy and do not disturb (page 2, 1st paragraph teaches instant messaging and uses these terms. Page 1, 5th paragraph teaches knowing if a user is logged on/off and/or active which reads on available/not available. Also, the 5th paragraph teaches use of the person's calendar which would indicate if the user is busy at an appointment and if they can be disturbed or not).

As per **claim 22**, Silver teaches an apparatus (examiner interprets the UNMM system shown on page 3 as being an apparatus/server), comprising:

A presence server (page 3 - PMD, PSM and UNMM hosted on server) comprising:

Presence information (page 3, PMD is a repository for subscriber presence information),

A location database comprising locations of a plurality of mobile devices (figure 2, 5th paragraph teaches determining cellular location of mobile),

A controller to find the locations of the plurality of mobile devices (page 2, 5th paragraph teaches cellular location of mobile), to determine a plurality of presence rules for the plurality of mobile devices (page 3 – PSM stores logic and rules-based processes that distill the flow of indicators into a "network presence"); wherein each of the presence rules comprises respective conditions and respective corresponding states and to update the presence information with the respective corresponding states when the respective conditions are met (page 3 – PSM takes into account the timing indicators and their ability to accurately reflect an entity's state which the examiner interprets as requiring knowledge of condition/state. Also see page 4, 4th paragraph teaches receiving notifications if/when presence data changes and/or page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered")), **but is silent on using a hotspot access points with which the mobile device connects.**

The examiner notes that hotspots are well known in the art and are typically used for short-range high-bandwidth RF communications (as they roam into said hotspot's coverage area).

_____Forssen teaches use of cell-based systems to determine a person's location
(abstract teaches use of TDOA, TOA and DOA , figure 5, 509, C1, L20-35) while **Smyth**
teaches that cellular networks provide macro and micro cells - the former provide
country wide coverage but a low bandwidth, the latter service local `hotspots` with
higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a
.hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via
well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of
applicant's invention to modify Silver, such that the location is determined using a
hotspot with which the mobile device communicates, to provide means for the user to
roam into hotspot areas and still have its location determined via said hotspot.

As per **claim 23**, Silver teaches claim 22 wherein the controller is further to
obtain the locations from the mobile devices (page 1, 5th paragraph teaches cellular
location of the mobile which reads on obtaining the locations of the mobile devices. The
examiner notes that many ways are possible, eg. using the BTS's to triangulate, GPS,
etc., and either the system or mobile can determine the location).'

As per **claim 25**, Silver teaches claim 22 wherein the location database further
comprises a mapping of coordinates to locations of the plurality of mobile devices (page
2, 5th paragraph teaches determining cell location of the mobile and page 3 teaches the
PMD which is a database/repository of subscriber presence information. One skilled
would ensure that the location information is included in the PMD database for all
mobiles tracked).

As per **claim 26**, Silver teaches claim 22 wherein the presence information
comprises reachability information (page 2, 3rd paragraph teaches "a given location"
while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores
presence data and the PSM uses logic/rules to determine an entity's state which reads
on the claim. See page 4, 3rd paragraph which discloses the user registering whereby

its location becomes known and the PSM updates location/state because the condition has changed from "logged off network" to "logged on to network". Hence, turning one's phone on will register the user onto the network, change their presence information thus changing their reachability status).

As per **claim 27**, Silver teaches claim 22 further comprising the plurality of mobile devices (page 3, PMD is a repository for all of the presence information for each mobile being tracked).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
Primary Examiner
6-10-2005